

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. Applicant has amended Claims 1, 3, 20 and 27-31. Applicant submits that no new matter has been added by these amendments. Therefore, Claims 1-37 remain pending in the application. This application has been carefully reviewed in light of the Official Action mailed November 25, 2003. Applicant respectfully requests reconsideration and favorable action in this case.

Rejections under 35 U.S.C. § 102

Claims 1, 2, 8-10, 12-21, 23-27, 31 and 35-37 stand rejected as anticipated by U.S. Patent No. 5,651,123 ("Nakagawa"). Applicant respectfully traverses this rejection.

In order for a claim to be anticipated, a prior art reference must disclose "each and every element as set forth in the claim." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as contained in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 122, 1239 (Fed. Cir. 1989). Moreover, "the elements must be arranged as required by the claim." *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990). Applicants respectfully point out that Nakagawa does not anticipate the present invention as it does not disclose every element of Claim 1.

Claim 1, as amended, recites an apparatus for allocating one or more processor resources to an instruction, comprising a sequence generator that generates one or more resource identifiers using at least a portion of a pseudorandom sequence, each resource identifier corresponding to one of the processor resources, and a resource identifier selector coupled to the sequence generator, the resource identifier selector selecting one or more of the resource identifiers for allocation to the instruction. Thus, the apparatus of Claim 1 generates resource identifiers which correspond to resources within the execution path of a processor (such as a reorder buffer entry). Once an instruction has been fetched, the requirements of an instruction may be determined, and based on the requirements of the instruction the resource identifier selector of Claim 1 may select one or more of the resource identifiers for allocation to the instruction.

In contrast, Nakagawa relates to program execution control devices for storing instructions to addresses of memory, wherein these addresses are sequentially designated in accordance with an M series pseudo-random number sequence in the order of program

addresses of each instruction. The instructions may then be fetched from memory using a feedback shift register for generating pseudo-random numbers in accordance with the M series pseudo-random number sequence and reading from the instruction memory according to addressing based on the generated pseudo-random number. (Col. 3, Line 9 – Col. 4, Line 26) Consequently, Nakagawa deals with the accessing of instruction memories through pseudo-random number based addressing, not the allocation of processor resources as recited by Claim 1. For similar reasons, the pseudo-random number generator of Nakagawa cannot function as the sequence generator of Claim 1. Nakagawa generates program addresses corresponding to locations in an instruction memory based on the pseudo-random number generator, not resource identifiers corresponding to one of the processor resources, as does the sequence generator recited in Claim 1.

Additionally, after reviewing the portions of Nakagawa cited by the Examiner, Applicant cannot find where Nakagawa discloses a resource identifier selector coupled to the sequence generator for selecting one or more resource identifiers for allocation to the instruction as asserted by the Examiner. Nakagawa discloses only a pseudo-random number program counter which outputs an address of an instruction to be read next from the instruction memory. The instruction can then be read from this address. (Col 7, Line 1-Col. 8 Line 10) Thus, the pseudo-random program counter generates an address identifying a location in memory which contains an instruction. In contrast, the resource identifier selector of Claim 1, selects from among the one or more resource identifiers and allocates the resource identifier to the instruction. Consequently, because the pseudo-random program counter of Nakagawa does not select an identifier from one or more identifiers (addresses) and the identifiers (addresses) of Nakagawa only identify a location where an instruction resides, Nakagawa does not disclose a resource identifier selector which selects one or more of the resource identifiers for allocation to the instruction, as recited in Claim 1.

Accordingly, as Nakagawa does not disclose all the limitations of Claim 1, Applicant respectfully requests the withdrawal of the rejection of Claim 1, and its respective dependent Claims 2, 8-10, 12-19. Additionally, as independent Claims 20 and 31 contain limitations substantially similar to Claim 1, Applicant respectfully requests the withdrawal of independent Claims 20 and 31 and their respective dependent Claims 21, 23-27, and 31 and 35-37.

Rejections under 35 U.S.C. § 103

Claims 3 and 4 stand rejected as obvious over U.S. Patent No. 5,651,123 ("Nakagawa") in view of U.S. Patent No. 5,490,280 ("Gupta"). As Claims 3 and 4 depend from Claim 1, Applicant respectfully submits that the above arguments presented with respect to Claim 1 apply equally well to the rejection of Claims 3 and 4. Accordingly, withdrawal of this rejection of Claims 3 and 4 is respectfully requested.

Claims 5, 6, 7, 22, 28, 29 and 32-24 stand rejected as obvious over U.S. Patent No. 5,651,123 ("Nakagawa") in view of U.S. Patent No. 5,530,837 ("Williams"). As Claims 5-7, depend from Claim 1, Claims 22, 28 and 29 depend from Claim 20 and Claims 32-34 depend from Claim 30, Applicant respectfully submits that the above arguments presented with respect to independent Claims 1, 20 and 30 apply equally well to the rejection of Claims 5, 6, 7, 22, 28, 29 and 32-24. Consequently, Applicant respectfully requests the withdrawal of the rejection of Claims 5, 6, 7, 22, 28, 29 and 32-24.

Claims 11 and 30 stand rejected as obvious over U.S. Patent No. 5,651,123 ("Nakagawa") in view of U.S. Patent No. 6,389,562 ("Kondo"). As Claims 11 and 30 depend from Claims 1 and 20 respectively, Applicant respectfully submits that the above arguments presented with respect to Claims 1 and 20 apply equally well to the rejection of Claims 11 and 30. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-37. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

An extension of three (3) months is requested and a Notification of Extension of Time Under 37 C.F.R. § 1.136 with the appropriate fee is enclosed herewith.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-0456 of Gray Cary Ware & Freidenrich, LLP.

Respectfully submitted,

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